

REMARKS

Claims 1-3, 5-8 and 29 are pending in the present application.

Issues under 35 U.S.C. § 103

The Examiner rejected claims 1-3, 5-8 and 29 under 35 U.S.C. 103(a) as being unpatentable over Tetsuo et al. (EP 1065234 A2) in view of Nomura et al. (UK Patent application 2138845 A). This rejection is respectfully traversed. Reconsideration and withdrawal thereof are requested.

Distinction over Tetsuo et al.

Tetsuo is directed to a silicone for powder treatment and a cosmetic containing a powder which has been surface-treated with organopolysiloxane. The process of surface-treating the powder involves:

1. Adding the silicone diluted with toluene to the powder,
2. Heating the powder to distill off the toluene, and
3. Stirring the powder at 150°C for 3 hours to effect a baking treatment.

This treatment causes the silicone to form a linkage with the powder surface which structurally changes the silicone. Therefore, since the organopolysiloxane bonded to the powder surface is chemically different as a result (which has been further explained in the Response filed April 29, 2008), a first distinction between the present invention and that of Tetsuo is that the cosmetic of Tetsuo does not contain silicone unaltered by a surface-treatment step. Secondly, any hairdressing application suggested by Tetsuo would require a powder which has the organopolysiloxane bonded on its surface by the baking step noted above and described at page 12, paragraph [0091]. This would not be conducive to the preparation of a hair treatment composition. Thirdly, even if the surface-treated powder of Tetsuo could be incorporated into a hair cosmetic according to the invention, the organopolysiloxane bonded to the powder would not be released from the powder into the cosmetic medium. Therefore, the advantages realized by the present invention which utilizes a free organopolysiloxane (i.e., the organopolysiloxane not bonded to powder) cannot be achieved, nor are they expected, from the teachings of Tetsuo.

The advantages of a surface-treated powder are taught in Tetsuo to be merely the storage stability of a dispersion (e.g. no sedimentation during storage). One of ordinary skill in the art would not be motivated to incorporate a surface-treated powder into a hair-conditioning composition with any expectation of achieving improved conditioning of the user's hair based on the teachings of Tetsuo. This result is completely unexpected.

Distinction over Nomura et al.

Nomura et al. is cited to overcome the deficiencies of Tetsuo et al. Specifically, the Office Action states that "Tetsuo lacks a teaching of a method wherein the organopolysiloxane hair treatment composition is applied after a composition comprising an amino-modified silicone." The rejection further states that the hair dye treatment of Nomura "is applied for 30 minutes and then thoroughly washed with a secondary composition and water (See page 6, lines 15-20)."

However, this interpretation of Nomura is incorrect. Nomura states at page 6, lines 16-20:

"In a mixture of the first and second lotion in equal amounts was immersed the hair for 30 minutes. The dyed hair was sufficiently washed with a 1% sodium dodecylsulfate aqueous solution and then with running water and air-dried."

Thus, Nomura teaches that the second lotion is mixed with the first lotion. The second lotion is not used to wash the hair following a treatment with the first lotion. Therefore Nomura is not analogous to the present invention wherein the organopolysiloxane hair treatment composition is applied after a composition comprising an amino-modified silicone. The mixing of the first and second lotions to be used in a single application is critical to Nomura since the hydrogen peroxide contained in the second lotion oxidizes the amines contained in the first lotion, thereby allowing the hair to be dyed. The dyed hair is then washed with 1 % sodium dodecylsulfate solution and water, not with a second lotion.

One of ordinary skill in the art, in possession of both Tetsuo et al. and Nomura et al. would have a combined teaching of (1) a cosmetic powder that has been surface-treated with organopolysiloxane and (2) a composition for dyeing hair which contains an amino-modified silicone. There is no motivation in Tetsuo to precede the application of the powder with any other composition, much less a hair dye composition since the powder formulations of Tetsuo

are not directed to hair dyes. Nor is there motivation in Nomura to replace one of the two lotions used in the hair dyeing process, or to replace the 1 % sodium dodecylsulfate solution used in the rinsing step with a cosmetic powder since Nomura is not directed to powder cosmetics. The skilled artisan, if searching for improved hair conditioning compositions, would certainly not infer any expectation of success from Tetsuo and Nomura, either alone or in combination.

Assuming, for the sake of argument, (1) that the cosmetic of Tetsuo does not contain silicone unaltered by a surface-treatment step; (2) that the surface-treated powder of Tetsuo can actually be incorporated into a cosmetic hair composition; (3) that the organopolysiloxane bonded to the powder can somehow be released from the powder into the cosmetic medium; and most importantly (4) that there is motivation to combine Tetsuo and Nomura, the skilled artisan would not arrive at the improved hair conditioning composition of the instant invention. Instead, the combined teachings would lead one to prepare a mixture containing both the cosmetic powder which has been surface-treated with organopolysiloxane and the amino-modified silicone hair dye. The skilled artisan would not expect this to be useful in any capacity, much less as a beneficial hair conditioning composition. Further, there is no motivation to use the amino-modified silicone hair dye composition of Nomura as a first step before applying the powder cosmetic of Tetsuo as a second step since there is no teaching of equivalency between the surface-treated powder of Tetsuo and the 1 % sodium dodecylsulfate solution which Nomura uses in the second step of the hair dyeing process. Accordingly, since the four necessary assumptions listed above cannot be made based on the teachings of Tetsuo and Nomura, the combination of Tetsuo and Nomura fails to make Applicants' invention obvious over these references.

The non-obviousness of the present invention is further supported by the attached Declaration submitted under 37 CFR 1.132. In the Declaration, a comparison has been made between the silicone (9) of the invention (hair treatment agent (A)) and a titanium dioxide powder which was surface-treated with the same silicone (9) according to the process of Tetsuo (hair treatment agent (B)). Hair treatment agents (A) and (B) were applied to a hair bundle sample by shampooing, treating, rinsing and drying the samples. This was repeated 20 times. The samples were evaluated immediately after the 1st treatment with agent (A) or (B), and then

further evaluated after the 20-cycle processing. These were compared to an untreated hair bundle sample. Table 2 of the Declaration shows the results of the comparison. After the initial treatment and after the 20-cycle processing, the sample treated with hair treatment agent (A) of the invention showed results far superior to the sample treated with hair treatment agent (B) of the prior art. Applicants submit that hair treatment agent (B) was inferior due to the fact that the silicone (9) was chemically bonded to the powder contained in agent (B), thereby eliminating any hydrophilic reactive sites. In hair treatment agent (A), the silicone (9) exists unaltered and therefore is able to impart beneficial properties to the hair treatment agent. Applicants further attempted to prepare a hair spray with the powder treated with silicone (9) according to Tetsuo, but the powder clogged the spray nozzle and therefore could not be evaluated.

For all of the aforesaid reasons, Applicants hair treatment agent is not obvious over Tetsuo et al. in view of Nomura et al. Withdrawal of the rejection is requested.

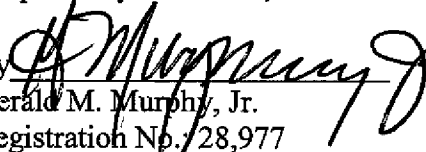
In view of the above amendment, applicant believes the pending application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Gerald M. Murphy, Jr. Reg. No. 28,977 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.147; particularly, extension of time fees.

Dated: September 2, 2008

Respectfully submitted,

By 

Gerald M. Murphy, Jr.

Registration No. 28,977

BIRCH, STEWART, KOLASCH & BIRCH, LLP

8110 Gatehouse Road

Suite 100 East

P.O. Box 747

Falls Church, Virginia 22040-0747

(703) 205-8000

Attorney for Applicant

Attachment: Executed Declaration by Masanao Kamei